NORLITE, LLC

628 SO. SARATOGA STREET
PO BOX 684
COHOES, NY 12047
PHONE: (518) 235-0401
FAX: (518) 235-0233

December 12, 2013

Ms. Nancy Baker
Deputy Regional Permit Administrator
New York State Department of Environmental Conservation
Region 4
1130 North Westcott Road
Schenectady, NY 12306-2014 RETURN RECEIPT REQUESTED VIA EMAIL

Mr. Kenneth Eng
Air Compliance Branch
United States Environmental Protection Agency
Region 2
290 Broadway
New York, NY 10007-1866 RETURN RECEIPT REQUESTED VIA EMAIL

Re: Norlite Corporation-MACT Excessive Exceedances Report
Kiln 1: 11/04/13 – 12/12/13
Kiln 2: 11/04/13 – 12/12/13

Dear Sir/Madam:

In accordance with 40 CFR 63.1206(c)(3)(vi), the Norlite, LLC (Norlite) is submitting an "Excessive Exceedance Report" for the timeframe of 11/04/13 thru 12/12/13. The attached document explains each of the "malfunctions" for Kilns One and Two.

The results of the investigation concluded a majority of the waste feed cutoffs were a result of the span limit associated with the stack gas flow monitor. Norlite conducted extensive troubleshooting to determine the cause of these stack gas flow rate cutoffs. The fuel source was reviewed, kiln operations were reviewed, the kiln was shutdown twice and the scrubber system inspected, and even the stack gas probes themselves replaced all in an effort to determine the cause of these cutoffs. Ultimately it was determined the cable which carries the instrument signal to the PLC was partially damaged with some of the wire strands being broken. Troubleshooting revealed the broken wire stands would short and cause the flow rate monitor to put out radically changing flow rates which would cause kiln cutoffs. The transmission cable was replaced by the I&E Department and the signal tested to ensure proper operation of the flow rate unit.

Norlite has been working help resolve stack gas span cutoffs in general for almost a year. Norlite has been working with the Department to install a new optical flow technology to monitor stack gas flow rate. A test unit has been installed on Kiln 1 and tested to obtain additional information to be used in future calculations. Norlite conducted an official RATA test on the optical flow sensor in Kiln 1 on November 26, 2013 which yielded very good results. Once the final report has been received by Norlite, the report along with a proposal for implementing official use of the unit will be submitted to the Department no later than December 17, 2013. Norlite is hopeful to have final approval to officially use the unit on Kiln 1 by the start of 2014. After final approval is given for the unit on Kiln 1, Norlite will install a unit on Kiln 2 with an expedited schedule for completion which will hopefully see the unit in certified operation by the end of January 2014.

DCL: 2413

NORLITE, LLC

Norlite has also been working with the Department to improve LGF delivery and handling at the kilns to address these types of cutoffs. The Department has conditionally approved Norlite's plan to remove the minimum LLGF Line Pressure requirement, allow a positive displacement pump to be used for fuel flow control, and allow the use of a recirculation line for use during times when off LGF. The Department has requested a six month study be conducted without a minimum LLGF Line Pressure requirement. The study was started on May 01, 2103 and completed on October 31, 2013. Norlite is continuing to search for a positive displacement pump which will allow variable speed control, have tight pump tolerance, and have suitable reliability for long term use. The results of the six month study which summarized over 4 million lines of operational data between the two kilns was submitted to the DEC on December 5, 2013. Based from the results of the six month study, Norlite feels the data supports the removal of the minimum LLGF Line Pressure requirement. Norlite is continuing to search for a positive displacement pump which will allow variable speed control, have tight pump tolerance, and have suitable reliability for long term use. As stated previously, Norlite has acquired the assistance of a process engineering firm to assist in the search for a suitable positive displacement pump and conduct an overall review of the entire kiln feed system which will meet all the criteria needed to make this a successful project. The process engineering firm has been supplied with facility drawings, had several discussions with Norlite personnel, and taken a facility tour to better understand the facility operations as they relate to fuel delivery at the kilns.

All of the malfunctions that occurred were consistent with our Startup, Shutdown and Malfunction Plan (SSMP). As approved by the NYSDEC on February 6, 2006, these reports are being sent electronically.

Should you have any questions regarding this letter, please contact me at (518) 235-0401 or email at: tom.vanvranken@tradebe.com.

Sincerely,

Thomas Van Vranken

Thomas Van Vranken
Environmental Manager

Attachments

ecc: Don Spencer, NYDEC – R4 w/attachments
James Lansing, NYSDEC – CO w/attachments
Joseph Hadersbeck, NYSDEC – R4w/attachments
Jim Quinn, NYSDEC – R4 w/attachments
Tita LaGrimas – Tradebe

DCL: 2413

NORLITE, LLC
MACT EXCEEDANCE REPORT - KILN 1
11/04/13 - 12/12/13

Start Date	Start Time	End Date	End Time	Downtime	#	Event	Cause	Parameter	Limit	Corrective Action
11/8/2013	7:35:57	11/8/2013	7:48:12	0:12:15	276	Malfunction	Strong Wind Gusts Cooled the Stack and Condensed the Water Vapor Which Affected the Stack Gas Probe and Triggered the Instantaneous Upper Instrument Setpoint to be Reached for Stack Gas Span	Stack Gas Flow Rate	Span	The ID Fan Speed Was Reduced and Oil Feed Added as an Input
11/8/2013	11:32:16	11/8/2013	11:38:31	0:06:15	277	Malfunction	Strong Wind Gusts Cooled the Stack and Condensed the Water Vapor Which Affected the Stack Gas Probe and Triggered the Instantaneous Upper Instrument Setpoint to be Reached for Stack Gas Span	Stack Gas Flow Rate	Span	The ID Fan Speed Was Reduced and Oil Feed Added as an Input
11/8/2013	11:53:11	11/8/2013	12:32:55	0:39:44	278	Malfunction	Strong Wind Gusts Cooled the Stack and Condensed the Water Vapor Which Affected the Stack Gas Probe and Triggered the Instantaneous Upper Instrument Setpoint to be Reached for Stack Gas Span	Stack Gas Flow Rate	Span	The ID Fan Speed Was Reduced and Oil Feed Added as an Input
11/8/2013	12:40:35	11/8/2013	12:41:32	0:00:57	279	Malfunction	Strong Wind Gusts Cooled the Stack and Condensed the Water Vapor Which Affected the Stack Gas Probe and Triggered the Instantaneous Upper Instrument Setpoint to be Reached for Stack Gas Span	Stack Gas Flow Rate	Span	The ID Fan Speed Was Reduced and Oil Feed Added as an Input
11/8/2013	13:08:23	11/8/2013	13:21:07	0:12:44	280	Malfunction	Strong Wind Gusts Cooled the Stack and Condensed the Water Vapor Which Affected the Stack Gas Probe and Triggered the Instantaneous Upper Instrument Setpoint to be Reached for Stack Gas Span	Stack Gas Flow Rate	Span	The ID Fan Speed Was Reduced and Oil Feed Added as an Input
11/12/2013	8:59:08	11/12/2013	9:03:43	0:04:35	281	Malfunction	Strong Wind Gusts Cooled the Stack and Condensed the Water Vapor Which Affected the Stack Gas Probe and Triggered the Instantaneous Upper Instrument Setpoint to be Reached for Stack Gas Span	Stack Gas Flow Rate	Span	The ID Fan Speed Was Reduced and Oil Feed Added as an Input
11/17/2013	9:05:38	11/17/2013	9:09:49	0:04:11	282	Malfunction	Instantaneous Upper Instrument Setpoint Reached for Stack Gas Span Due to Water Droplets From the Mist Pad Hitting the Probe	Stack Gas Flow Rate	Span	The ID Fan Speed Was Reduced to Help Minimize Water Droplet Movement
11/18/2013	4:13:50	11/18/2013	4:16:17	0:02:27	283	Malfunction	The Remote PLC Input Rack Faulted Which Caused the Rear Chamber Pressure to Fault and Reach the Upper Instrument Setpoint	Back Chamber Pressure	Span	I & E Reset the Remote Rack Which Established the Rear Chamber Pressure
11/20/2013	18:33:51	11/20/2013	18:35:39	0:01:48	284	Malfunction	Air Bubbles Formed in the MicroMotion Causing Faulty Flow Readings Which Caused the LGF Flow Rate HRA to be Reached	LGF Flow		The MicroMotion Was Flushed With Oil to Displace the Air Bubbles
11/21/2013	12:57:45	11/21/2013	13:00:37	0:02:52	285	Malfunction	The Operators Were Controlling Fuel Flow Using Valve Which Caused a Fuel Surge to Occur Which Triggered the Instantaneous Upper Instrument Setpoint to be Reached for LGF Flow Span	LGF Flow	Span	Third Party Process Engineers Are Reviewing the Feed System to Provide Operational Improvements

NORLITE, LLC
MACT EXCEEDANCE REPORT - KILN 1
11/04/13 - 12/12/13

Start Date	Start Time	End Date	End Time	Downtime	#	Event	Cause	Parameter	Limit	Corrective Action
11/21/2013	21:30:22	11/21/2013	22:32:44	1:02:22	286	Malfunction	The Operators Were Controlling Fuel Flow Using Valve Which Caused a Fuel Surge to Occur, Affecting the Frontend Differential Kiln Pressure / A Fuel Surge Caused High CO's	Front Kiln Pressure, 1 Second Delay	Opl	Third Party Process Engineers Are Reviewing the Feed System to Provide Operational Improvements
11/23/2013	12:46:55	11/23/2013	12:50:05	0:03:10	287	Malfunction	The Mist Pad Became Plugged With Soda Ash Solids Which Allowed Water Droplets to Travel Up the Stack and Contact the Probe Causing the Instantaneous Upper Instrument Setpoint to be Reached for Stack Gas Span	Stack Gas Flow Rate	Span	Scrubber Maintenance Occurred On Kiln 1 During a Planned Facility Power Outage On 12/04/13
11/23/2013	13:48:40	11/23/2013	14:28:19	0:39:39	288	Malfunction	The Mist Pad Became Plugged With Soda Ash Solids Which Allowed Water Droplets to Travel Up the Stack and Contact the Probe Causing the Instantaneous Upper Instrument Setpoint to be Reached for Stack Gas Span	Stack Gas Flow Rate	Span	Scrubber Maintenance Occurred On Kiln 1 During a Planned Facility Power Outage On 12/04/13
11/23/2013	17:49:10	11/23/2013	18:10:41	0:21:31	289	Malfunction	The Mist Pad Became Plugged With Soda Ash Solids Which Allowed Water Droplets to Travel Up the Stack and Contact the Probe Causing the Instantaneous Upper Instrument Setpoint to be Reached for Stack Gas Span	Stack Gas Flow Rate	Span	Scrubber Maintenance Occurred On Kiln 1 During a Planned Facility Power Outage On 12/04/13
11/24/2013	7:33:00	11/24/2013	9:02:53	1:29:53	290	Malfunction	The Mist Pad Became Plugged With Soda Ash Solids Which Allowed Water Droplets to Travel Up the Stack and Contact the Probe Causing the Instantaneous Upper Instrument Setpoint to be Reached for Stack Gas Span	Stack Gas Flow Rate	Span	Scrubber Maintenance Occurred On Kiln 1 During a Planned Facility Power Outage On 12/04/13
11/24/2013	9:33:53	11/24/2013	10:34:45	1:00:52	291	Malfunction	The Mist Pad Became Plugged With Soda Ash Solids Which Allowed Water Droplets to Travel Up the Stack and Contact the Probe Causing the Instantaneous Upper Instrument Setpoint to be Reached for Stack Gas Span	Stack Gas Flow Rate	Span	Scrubber Maintenance Occurred On Kiln 1 During a Planned Facility Power Outage On 12/04/13
11/25/2013	1:05:14	11/25/2013	1:06:19	0:01:05	292	Malfunction	After Rinsing the Mist Pad, Some of the Soda Ash Solids Dissolved Causing the Instantaneous Upper Instrument Setpoint to be Reached for Scrubber pH Span	Scrubber pH	Span	The Blowdown Rate Was Increased to Remove the Extra Water From the System
11/25/2013	1:35:54	11/25/2013	1:36:50	0:00:56	293	Malfunction	After Rinsing the Mist Pad, Some of the Soda Ash Solids Dissolved Causing the Instantaneous Upper Instrument Setpoint to be Reached for Scrubber pH Span	Scrubber pH	Span	Adjusted Scrubber pH
11/25/2013	1:47:20	11/25/2013	1:48:28	0:01:08	294	Malfunction	After Rinsing the Mist Pad, Some of the Soda Ash Solids Dissolved Causing the Instantaneous Upper Instrument Setpoint to be Reached for Scrubber pH Span	Scrubber pH	Span	Adjusted Scrubber pH

NORLITE, LLC
MACT EXCEEDANCE REPORT - KILN 1
11/04/13 - 12/12/13

Start Date	Start Time	End Date	End Time	Downtime	#	Event	Cause	Parameter	Limit	Corrective Action
11/25/2013	6:47:12	11/25/2013	7:18:44	0:31:32	295	Malfunction	After Significant Troubleshooting of the Scrubber System, Stack gas Probes, and Overall Kiln Operations, It Was Determined the Signal Wire Which Transmit the Signal to the PLC was Partially Damaged Which Caused Signal Shorts to Occurred Which Triggered the Instantaneous Upper Instrument Setpoint to be Reached for Stack Gas Span	Stack Gas Flow Rate	Span	The Cable Was Replaced and Proper Signal Verified by I&E On 12/11/13
11/26/2013	7:00:55	11/26/2013	7:03:11	0:02:16	296	Malfunction	After Significant Troubleshooting of the Scrubber System, Stack gas Probes, and Overall Kiln Operations, It Was Determined the Signal Wire Which Transmit the Signal to the PLC was Partially Damaged Which Caused Signal Shorts to Occurred Which Triggered the Instantaneous Upper Instrument Setpoint to be Reached for Stack Gas Span	Stack Gas Flow Rate	Span	The Cable Was Replaced and Proper Signal Verified by I&E On 12/11/13
11/26/2013	10:38:47	11/26/2013	10:42:49	0:04:02	297	Malfunction	After Rinsing the Mist Pad, Some of the Soda Ash Solids Dissolved Causing the Instantaneous Upper Instrument Setpoint to be Reached for Scrubber pH Span	Scrubber pH	Span	Adjusted Scrubber pH
11/28/2013	7:26:18	11/28/2013	7:27:54	0:01:36	298	Malfunction	The Operators Were Controlling Fuel Flow Using Valve Which Caused a Fuel Surge to Occur, Affecting the Frontend Differential Kiln Pressure	Front Kiln Pressure, 1 Second Delay	Opl	Third Party Process Engineers Are Reviewing the Feed System to Provide Operational Improvements
11/28/2013	9:33:08	11/28/2013	9:33:29	0:00:21	299	Malfunction	After Significant Troubleshooting of the Scrubber System, Stack gas Probes, and Overall Kiln Operations, It Was Determined the Signal Wire Which Transmit the Signal to the PLC was Partially Damaged Which Caused Signal Shorts to Occurred Which Triggered the Instantaneous Upper Instrument Setpoint to be Reached for Stack Gas Span	Stack Gas Flow Rate	Span	The Cable Was Replaced and Proper Signal Verified by I&E On 12/11/13
11/28/2013	9:36:00	11/28/2013	9:40:20	0:04:20	300	Malfunction	After Significant Troubleshooting of the Scrubber System, Stack gas Probes, and Overall Kiln Operations, It Was Determined the Signal Wire Which Transmit the Signal to the PLC was Partially Damaged Which Caused Signal Shorts to Occurred Which Triggered the Instantaneous Upper Instrument Setpoint to be Reached for Stack Gas Span	Stack Gas Flow Rate	Span	The Cable Was Replaced and Proper Signal Verified by I&E On 12/11/13

NORLITE, LLC
MACT EXCEEDANCE REPORT - KILN 1
11/04/13 - 12/12/13

Start Date	Start Time	End Date	End Time	Downtime	#	Event	Cause	Parameter	Limit	Corrective Action
11/28/2013	10:17:45	11/28/2013	10:18:22	0:00:37	301	Malfunction	After Significant Troubleshooting of the Scrubber System, Stack gas Probes, and Overall Kiln Operations, It Was Determined the Signal Wire Which Transmit the Signal to the PLC was Partially Damaged Which Caused Signal Shorts to Occurred Which Triggered the Instantaneous Upper Instrument Setpoint to be Reached for Stack Gas Span	Stack Gas Flow Rate	Span	The Cable Was Replaced and Proper Signal Verified by I&E On 12/11/13
11/28/2013	11:25:21	11/28/2013	11:25:45	0:00:24	302	Malfunction	After Significant Troubleshooting of the Scrubber System, Stack gas Probes, and Overall Kiln Operations, It Was Determined the Signal Wire Which Transmit the Signal to the PLC was Partially Damaged Which Caused Signal Shorts to Occurred Which Triggered the Instantaneous Upper Instrument Setpoint to be Reached for Stack Gas Span	Stack Gas Flow Rate	Span	The Cable Was Replaced and Proper Signal Verified by I&E On 12/11/13
11/28/2013	12:07:35	11/28/2013	12:10:18	0:02:43	303	Malfunction	After Significant Troubleshooting of the Scrubber System, Stack gas Probes, and Overall Kiln Operations, It Was Determined the Signal Wire Which Transmit the Signal to the PLC was Partially Damaged Which Caused Signal Shorts to Occurred Which Triggered the Instantaneous Upper Instrument Setpoint to be Reached for Stack Gas Span	Stack Gas Flow Rate	Span	The Cable Was Replaced and Proper Signal Verified by I&E On 12/11/13
11/28/2013	12:23:54	11/28/2013	12:24:17	0:00:23	304	Malfunction	After Significant Troubleshooting of the Scrubber System, Stack gas Probes, and Overall Kiln Operations, It Was Determined the Signal Wire Which Transmit the Signal to the PLC was Partially Damaged Which Caused Signal Shorts to Occurred Which Triggered the Instantaneous Upper Instrument Setpoint to be Reached for Stack Gas Span	Stack Gas Flow Rate	Span	The Cable Was Replaced and Proper Signal Verified by I&E On 12/11/13
11/30/2013	17:22:43	11/30/2013	17:29:42	0:06:59	305	Malfunction	The Operators Were Controlling Fuel Flow Using Valve Which Caused a Fuel Surge to Occur, Affecting the Frontend Differential Kiln Pressure	Front Kiln Pressure, 1 Second Delay	Opl	Third Party Process Engineers Are Reviewing the Feed System to Provide Operational Improvements
12/6/2013	14:02:40	12/6/2013	14:03:03	0:00:23	306	Malfunction	After Significant Troubleshooting of the Scrubber System, Stack gas Probes, and Overall Kiln Operations, It Was Determined the Signal Wire Which Transmit the Signal to the PLC was Partially Damaged Which Caused Signal Shorts to Occurred Which Triggered the Instantaneous Upper Instrument Setpoint to be Reached for Stack Gas Span	Stack Gas Flow Rate	Span	The Cable Was Replaced and Proper Signal Verified by I&E On 12/11/13

NORLITE, LLC
MACT EXCEEDANCE REPORT - KILN 1
11/04/13 - 12/12/13

Start Date	Start Time	End Date	End Time	Downtime	#	Event	Cause	Parameter	Limit	Corrective Action
12/6/2013	14:29:28	12/6/2013	14:54:10	0:24:42	307	Malfunction	After Significant Troubleshooting of the Scrubber System, Stack gas Probes, and Overall Kiln Operations, It Was Determined the Signal Wire Which Transmit the Signal to the PLC was Partially Damaged Which Caused Signal Shorts to Occurred Which Triggered the Instantaneous Upper Instrument Setpoint to be Reached for Stack Gas Span	Stack Gas Flow Rate	Span	The Cable Was Replaced and Proper Signal Verified by I&E On 12/11/13
12/10/2013	18:24:24	12/10/2013	18:25:26	0:01:02	308	Malfunction	After Significant Troubleshooting of the Scrubber System, Stack gas Probes, and Overall Kiln Operations, It Was Determined the Signal Wire Which Transmit the Signal to the PLC was Partially Damaged Which Caused Signal Shorts to Occurred Which Triggered the Instantaneous Upper Instrument Setpoint to be Reached for Stack Gas Span	Stack Gas Flow Rate	Span	The Cable Was Replaced and Proper Signal Verified by I&E On 12/11/13
12/10/2013	19:14:38	12/10/2013	19:15:50	0:01:12	309	Malfunction	After Significant Troubleshooting of the Scrubber System, Stack gas Probes, and Overall Kiln Operations, It Was Determined the Signal Wire Which Transmit the Signal to the PLC was Partially Damaged Which Caused Signal Shorts to Occurred Which Triggered the Instantaneous Upper Instrument Setpoint to be Reached for Stack Gas Span	Stack Gas Flow Rate	Span	The Cable Was Replaced and Proper Signal Verified by I&E On 12/11/13
12/11/2013	1:25:40	12/11/2013	1:27:10	0:01:30	310	Malfunction	After Significant Troubleshooting of the Scrubber System, Stack gas Probes, and Overall Kiln Operations, It Was Determined the Signal Wire Which Transmit the Signal to the PLC was Partially Damaged Which Caused Signal Shorts to Occurred Which Triggered the Instantaneous Upper Instrument Setpoint to be Reached for Stack Gas Span	Stack Gas Flow Rate	Span	The Cable Was Replaced and Proper Signal Verified by I&E On 12/11/13
12/11/2013	1:32:29	12/11/2013	1:43:01	0:10:32	311	Malfunction	After Significant Troubleshooting of the Scrubber System, Stack gas Probes, and Overall Kiln Operations, It Was Determined the Signal Wire Which Transmit the Signal to the PLC was Partially Damaged Which Caused Signal Shorts to Occurred Which Triggered the Instantaneous Upper Instrument Setpoint to be Reached for Stack Gas Span	Stack Gas Flow Rate	Span	The Cable Was Replaced and Proper Signal Verified by I&E On 12/11/13
12/11/2013	1:58:07	12/11/2013	2:32:52	0:34:45	312	Malfunction	After Significant Troubleshooting of the Scrubber System, Stack gas Probes, and Overall Kiln Operations, It Was Determined the Signal Wire Which Transmit the Signal to the PLC was Partially Damaged Which Caused Signal Shorts to Occurred Which Triggered the Instantaneous Upper Instrument Setpoint to be Reached for Stack Gas Span	Stack Gas Flow Rate	Span	The Cable Was Replaced and Proper Signal Verified by I&E On 12/11/13

NORLITE, LLC

MACT EXCEEDANCE REPORT - KILN 1

11/04/13 - 12/12/13

Start Date	Start Time	End Date	End Time	Downtime	#	Event	Cause	Parameter	Limit	Corrective Action
12/11/2013	2:44:03	12/11/2013	2:44:25	0:00:22	313	Malfunction	After Significant Troubleshooting of the Scrubber System, Stack gas Probes, and Overall Kiln Operations, It Was Determined the Signal Wire Which Transmit the Signal to the PLC was Partially Damaged Which Caused Signal Shorts to Occurred Which Triggered the Instantaneous Upper Instrument Setpoint to be Reached for Stack Gas Span	Stack Gas Flow Rate	Span	The Cable Was Replaced and Proper Signal Verified by I&E On 12/11/13
12/11/2013	2:44:29	12/11/2013	3:07:35	0:23:06	314	Malfunction	After Significant Troubleshooting of the Scrubber System, Stack gas Probes, and Overall Kiln Operations, It Was Determined the Signal Wire Which Transmit the Signal to the PLC was Partially Damaged Which Caused Signal Shorts to Occurred Which Triggered the Instantaneous Upper Instrument Setpoint to be Reached for Stack Gas Span	Stack Gas Flow Rate	Span	The Cable Was Replaced and Proper Signal Verified by I&E On 12/11/13
12/11/2013	3:43:28	12/11/2013	10:51:04	7:07:36	315	Malfunction	After Significant Troubleshooting of the Scrubber System, Stack gas Probes, and Overall Kiln Operations, It Was Determined the Signal Wire Which Transmit the Signal to the PLC was Partially Damaged Which Caused Signal Shorts to Occurred Which Triggered the Instantaneous Upper Instrument Setpoint to be Reached for Stack Gas Span/ Kiln Shutdown to Inspect Scrubber System	Stack Gas Flow Rate	Span	The Cable Was Replaced and Proper Signal Verified by I&E On 12/11/13

NORLITE, LLC
MACT EXCEEDANCE REPORT - KILN 2
11/04/13 - 12/12/13

Start Date	Start Time	End Date	End Time	Downtime	#	Event	Cause	Parameter	Limit	Corrective Action
11/7/2013	6:21:56	11/7/2013	6:22:55	0:00:59	137	Malfunction	The Operators Were Controlling Fuel Flow Using Valve Which Caused a Fuel Surge to Occur, Affecting the Frontend Differential Kiln Pressure	Front Kiln Pressure, 1 Second Delay	Opl	Third Party Process Engineers Are Reviewing the Feed System to Provide Operational Improvements
11/8/2013	13:53:21	11/8/2013	14:12:47	0:19:26	138	Malfunction	The LGF Pump Surged and Then Stopped Which Caused the Instantaneous Upper Instrument Setpoint to be Reached for LGF Flow Span	LGF Flow	Span	The Fuel Farm Technician Switched the Kiln to a Different Tank
11/20/2013	3:38:51	11/20/2013	6:12:45	2:33:54	139	Malfunction	A Used Oil Flow Rate Surge Occurred Which Caused a Pressure Pulse in the Kiln Chamber Which Affected the Rear Chamber Difference Pressure and Caused the CO's to Rise	Back Chamber Pressure, 1 Second Delay	Opl	The Plant Mechanic Inspected the Used Oil Burner Tip for Damage Which Might Have Caused the Flow Surge
11/21/2013	12:57:45	11/21/2013	12:58:18	0:00:33	140	Malfunction	The Operators Were Controlling Fuel Flow Using Valve Which Caused a Fuel Surge to Occur Causing the Instantaneous Upper Instrument Setpoint to be Reached for LGF Flow Span	LGF Flow	Span	Third Party Process Engineers Are Reviewing the Feed System to Provide Operational Improvements
11/25/2013	21:56:06	11/25/2013	21:56:43	0:00:37	141	Malfunction	The Operators Were Controlling Fuel Flow Using Valve Which Caused a Fuel Surge to Occur Causing the Instantaneous Upper Instrument Setpoint to be Reached for LGF Flow Span	LGF Flow	Span	Third Party Process Engineers Are Reviewing the Feed System to Provide Operational Improvements
12/3/2013	17:12:10	12/3/2013	17:13:09	0:00:59	142	Malfunction	The Flow Meter Faulted Due to Internal Issues Which the Manufacturer Is Currently Addressing. The Fault Caused the Instantaneous Upper Instrument Setpoint to be Reached for Scrubber Recirc. Rate Span	Scrubber Recirc. Rate	Span	The Flow Meter Was Replaced With A Spare Meter by I&E
12/10/2013	19:54:05	12/10/2013	19:54:42	0:00:37	143	Malfunction	The Operators Were Controlling Fuel Flow Using Valve Which Caused a Fuel Surge to Occur Causing the Instantaneous Upper Instrument Setpoint to be Reached for LGF Flow Span	LGF Flow	Span	Third Party Process Engineers Are Reviewing the Feed System to Provide Operational Improvements